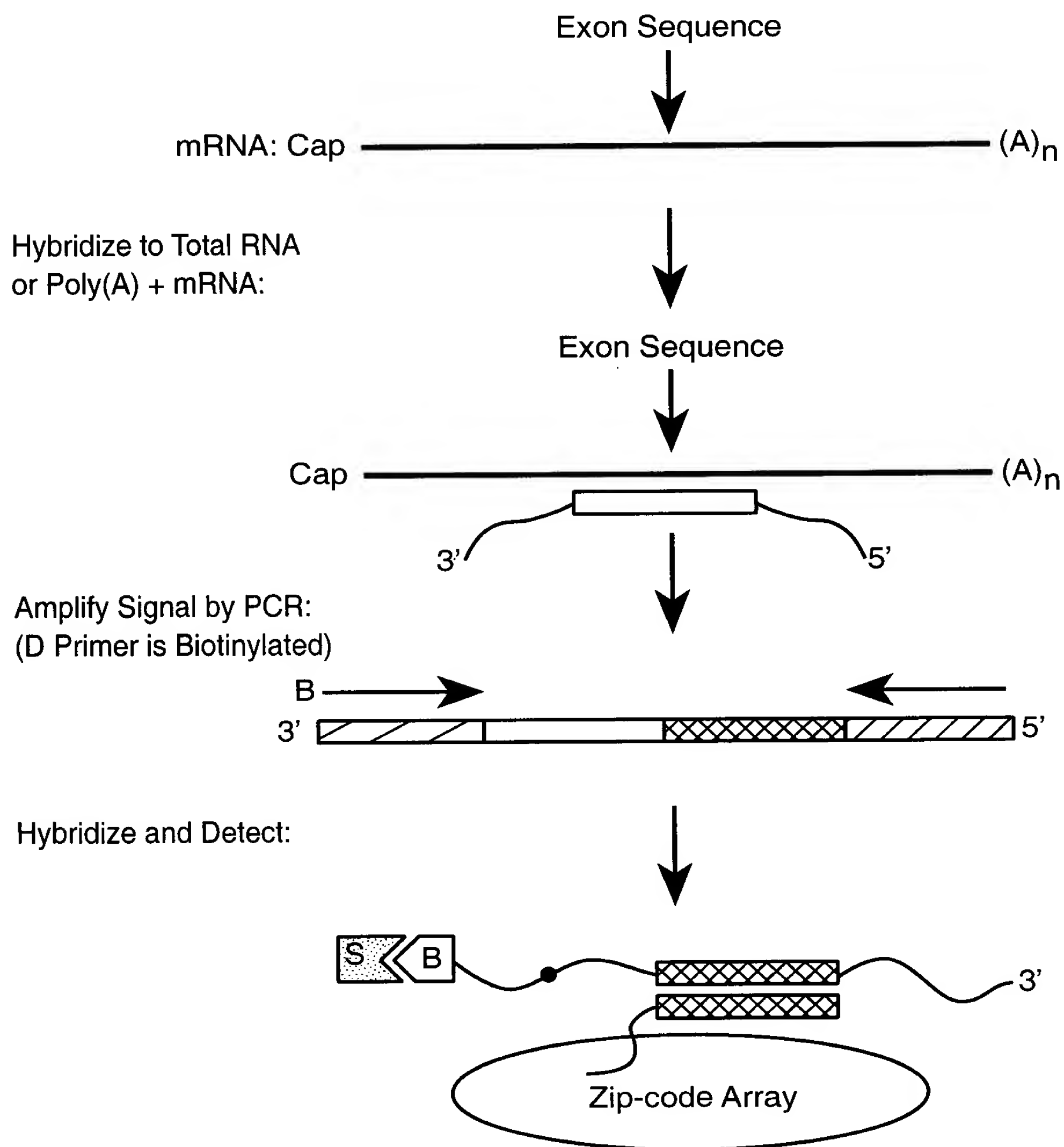


## A Flow Chart for Array-based Detection of Gene Expression

Hybridization Oligo: 3' 5'

U: Upstream universal priming site  
 Zip: Unique sequence as a molecular "zip-code"  
 EX: Gene-specific exon sequence  
 D: Downstream universal priming site

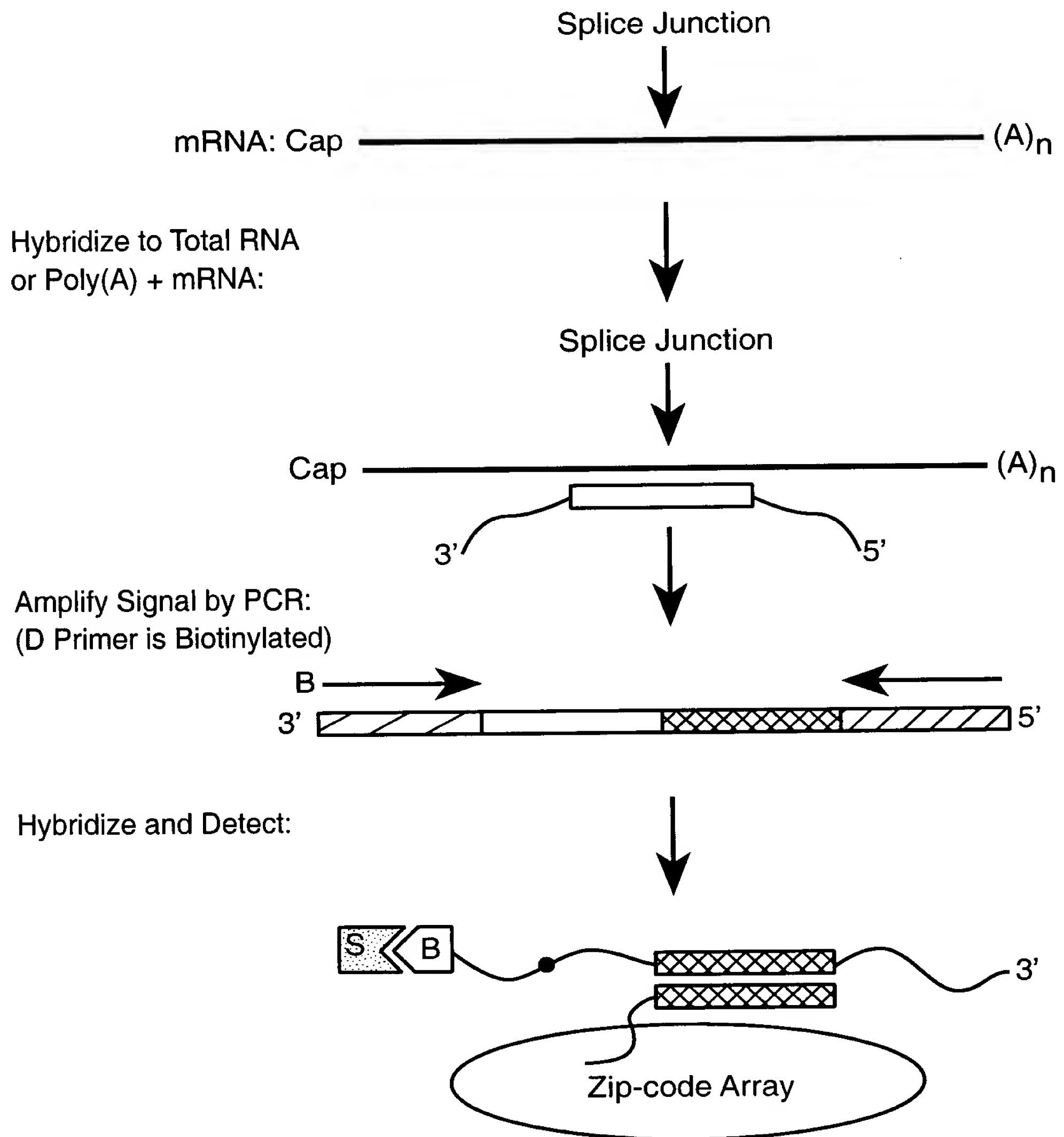


**FIG. 1**

# A Flow Chart for Array-based Detection of RNA Alternative Splicing

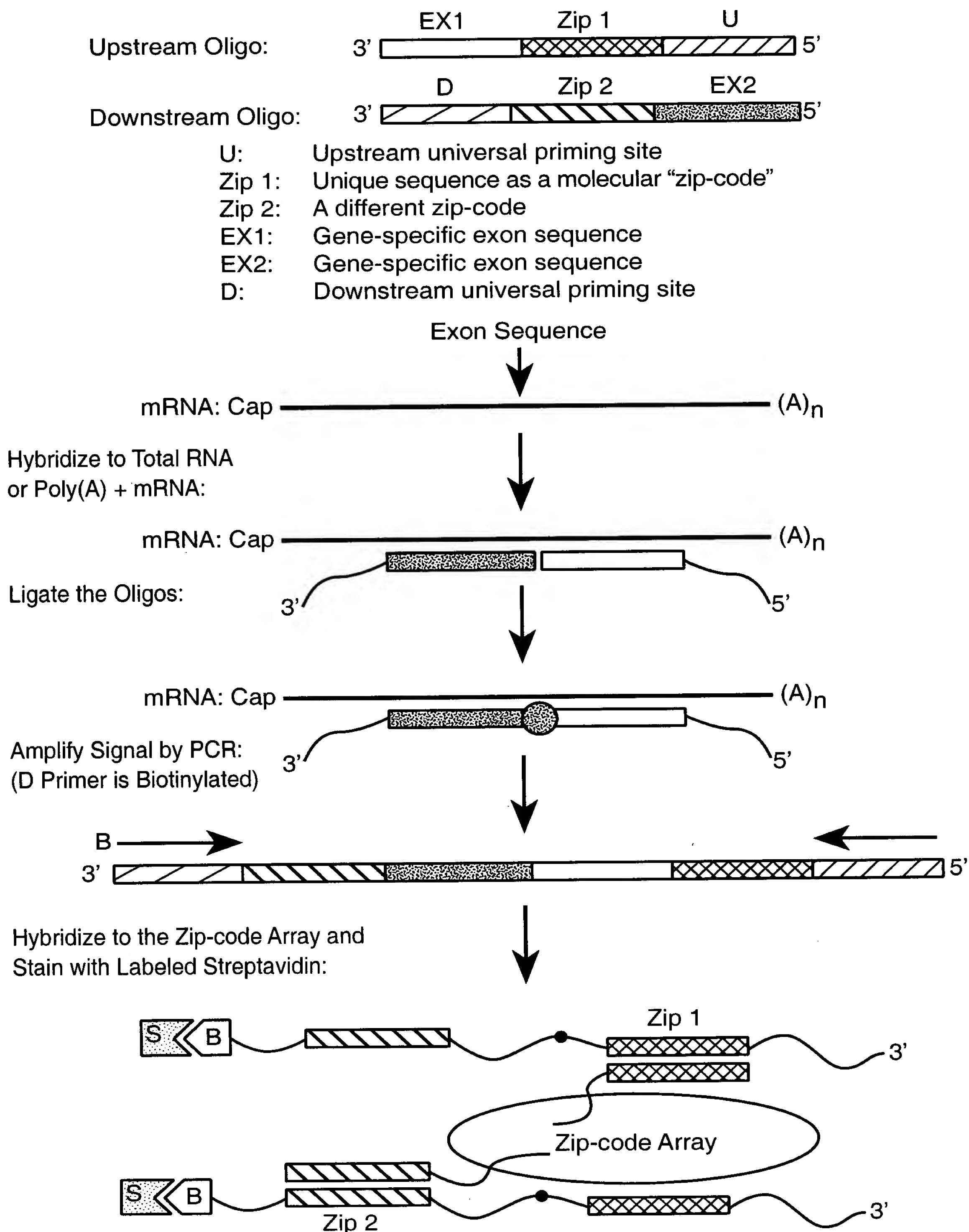
Hybridization Oligo: 3'  5'

U: Upstream universal priming site  
Zip: Unique sequence as a molecular "zip-code"  
SJ: Gene-specific splice junction  
D: Downstream universal priming site



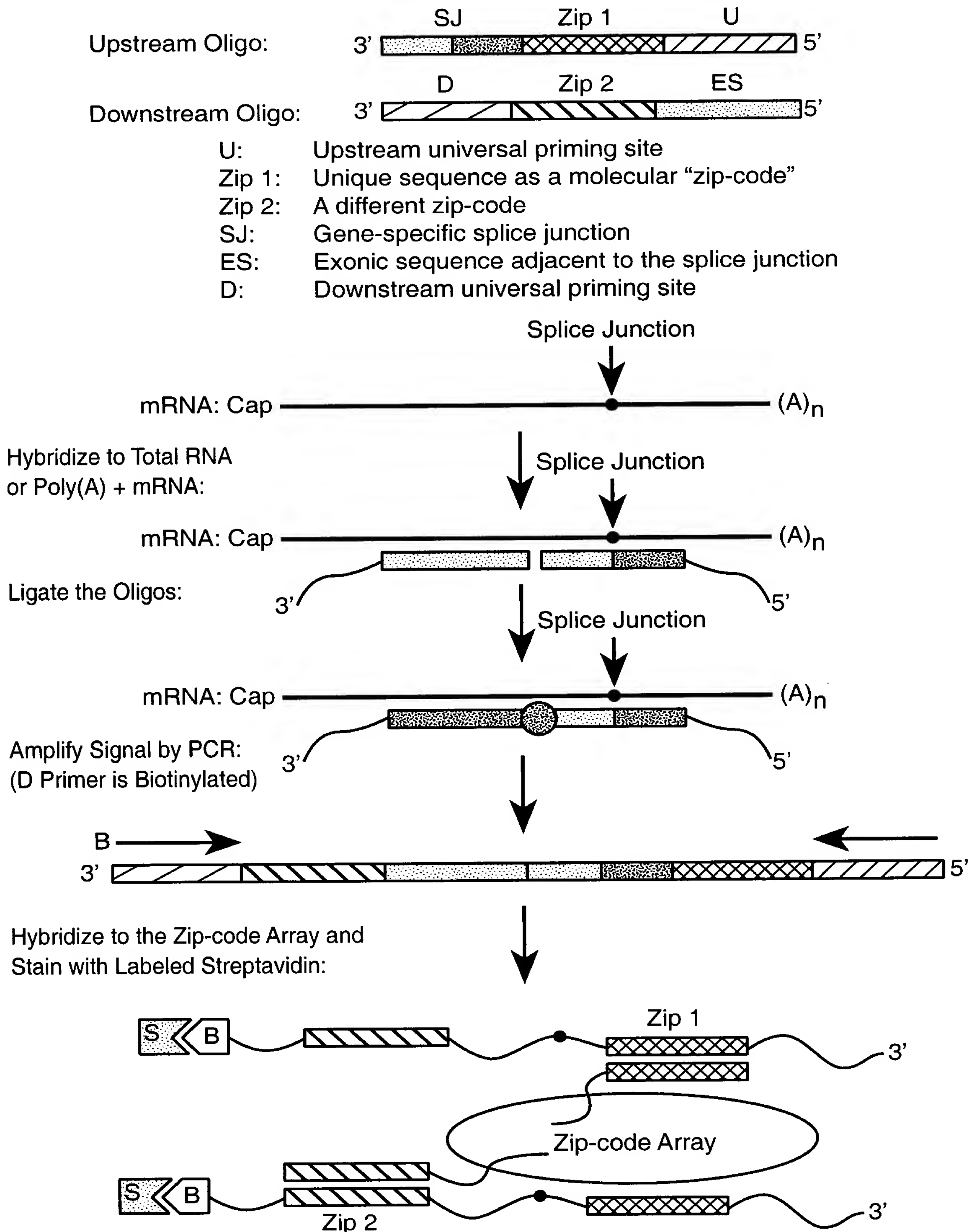
**FIG.\_2**

# Genome-wide Gene Expression Profiling Using Oligo-ligation Strategy



**FIG.\_3**

## Genome-wide RNA Alternative Splicing Monitoring Using Oligo-Ligation Strategy



**FIG.\_4**

Direct Genotyping Using a Whole-genome Oligo-ligation Strategy

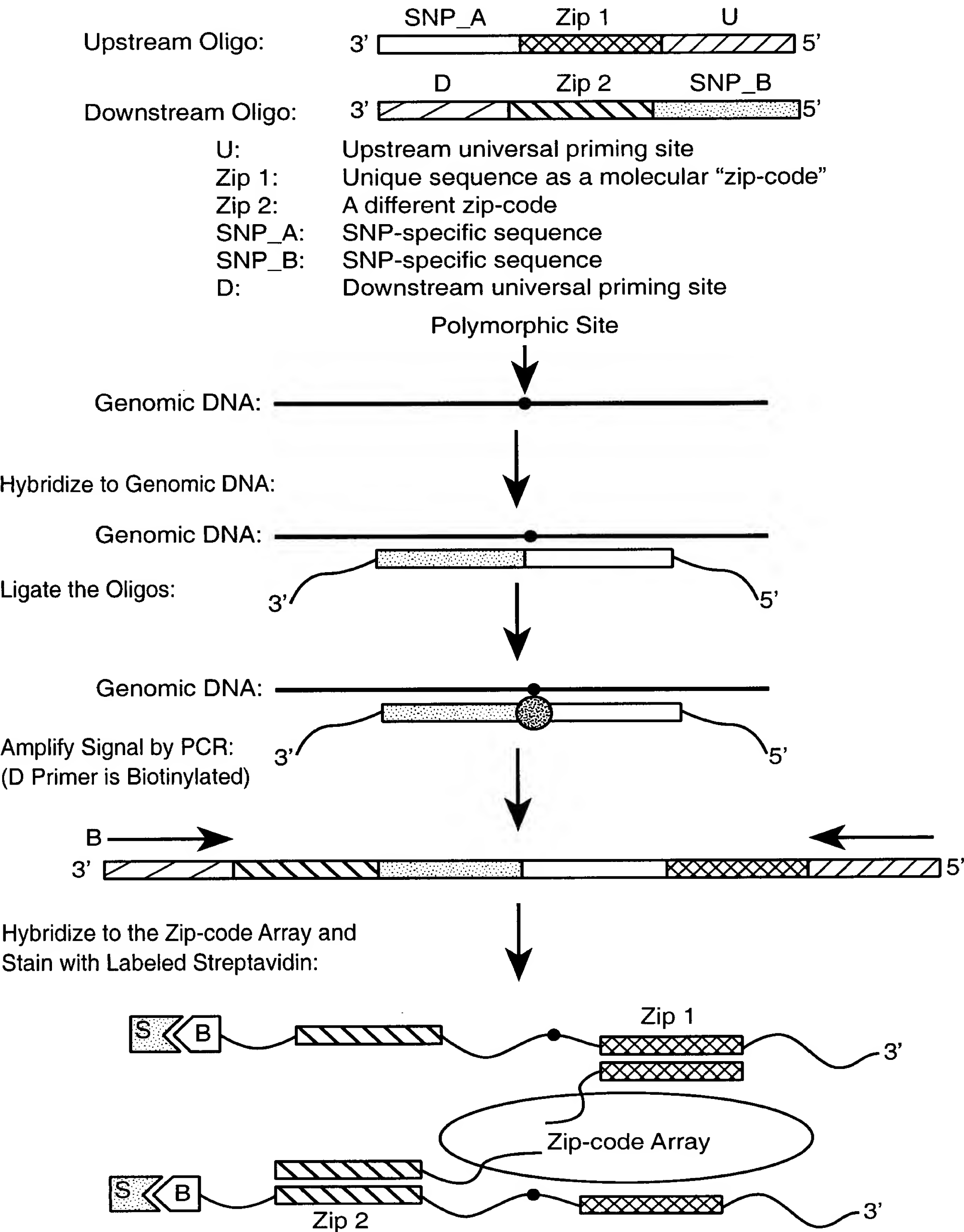
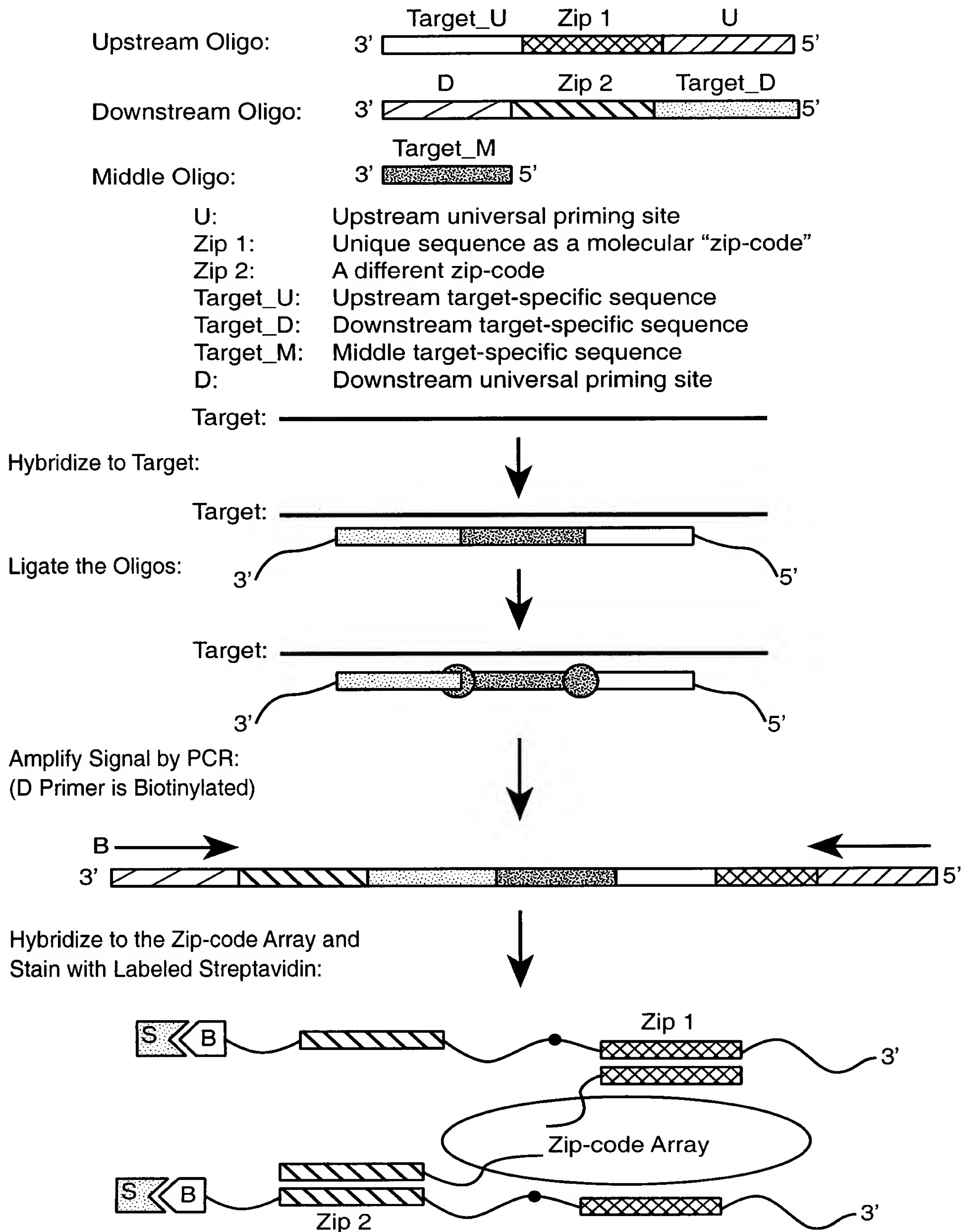


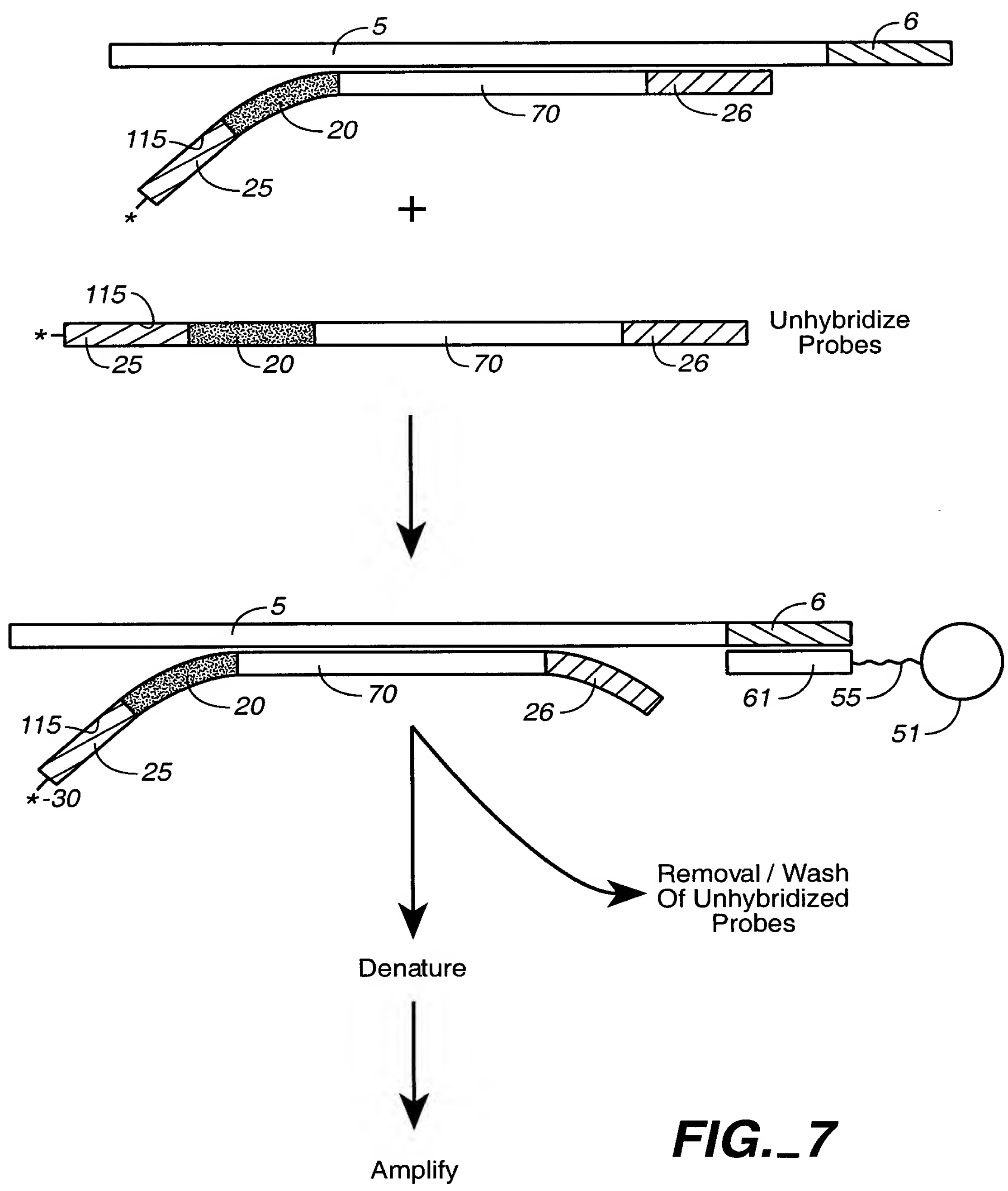
FIG.\_5

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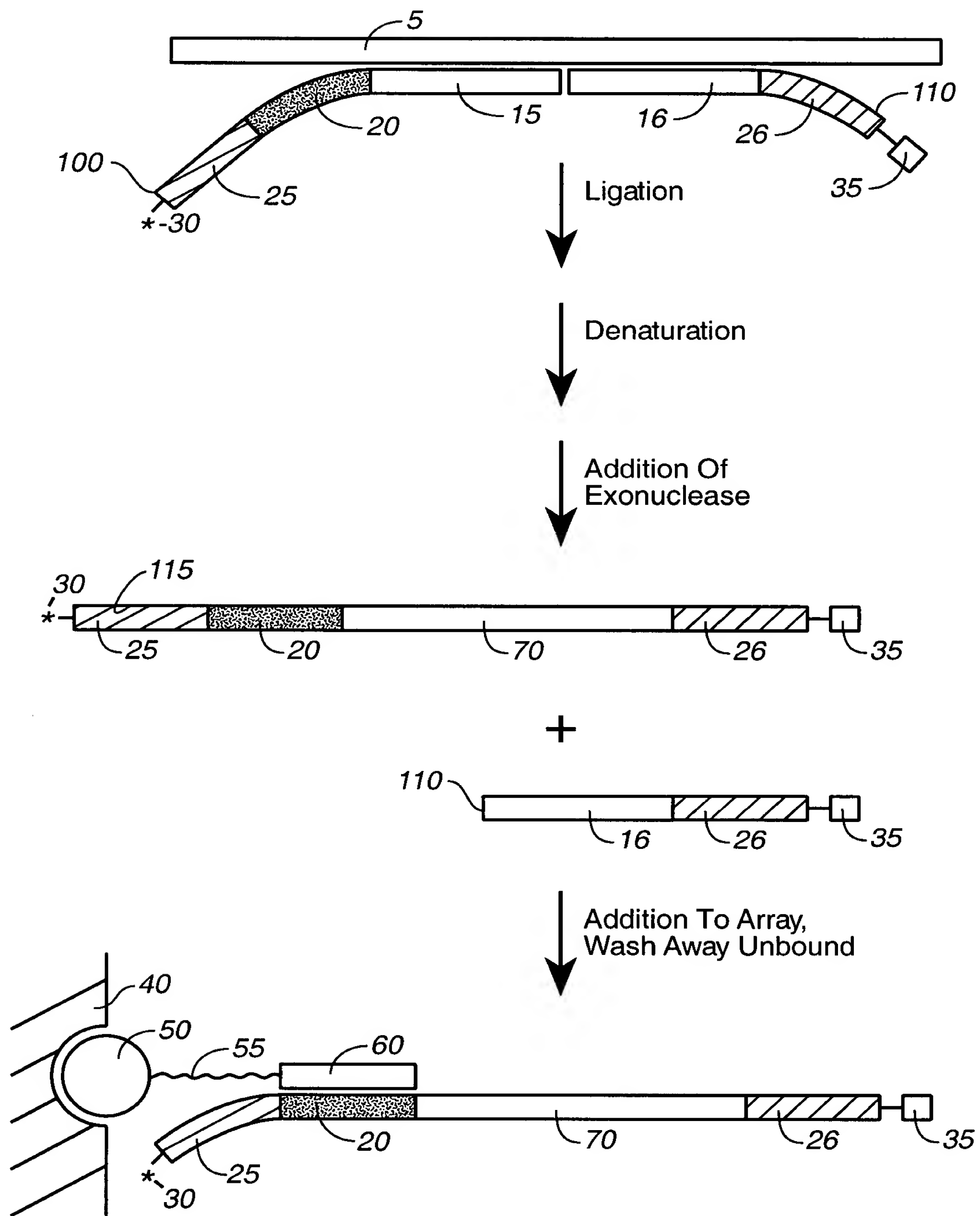
### Whole-genome Oligo-ligation Strategy



**FIG.\_6**

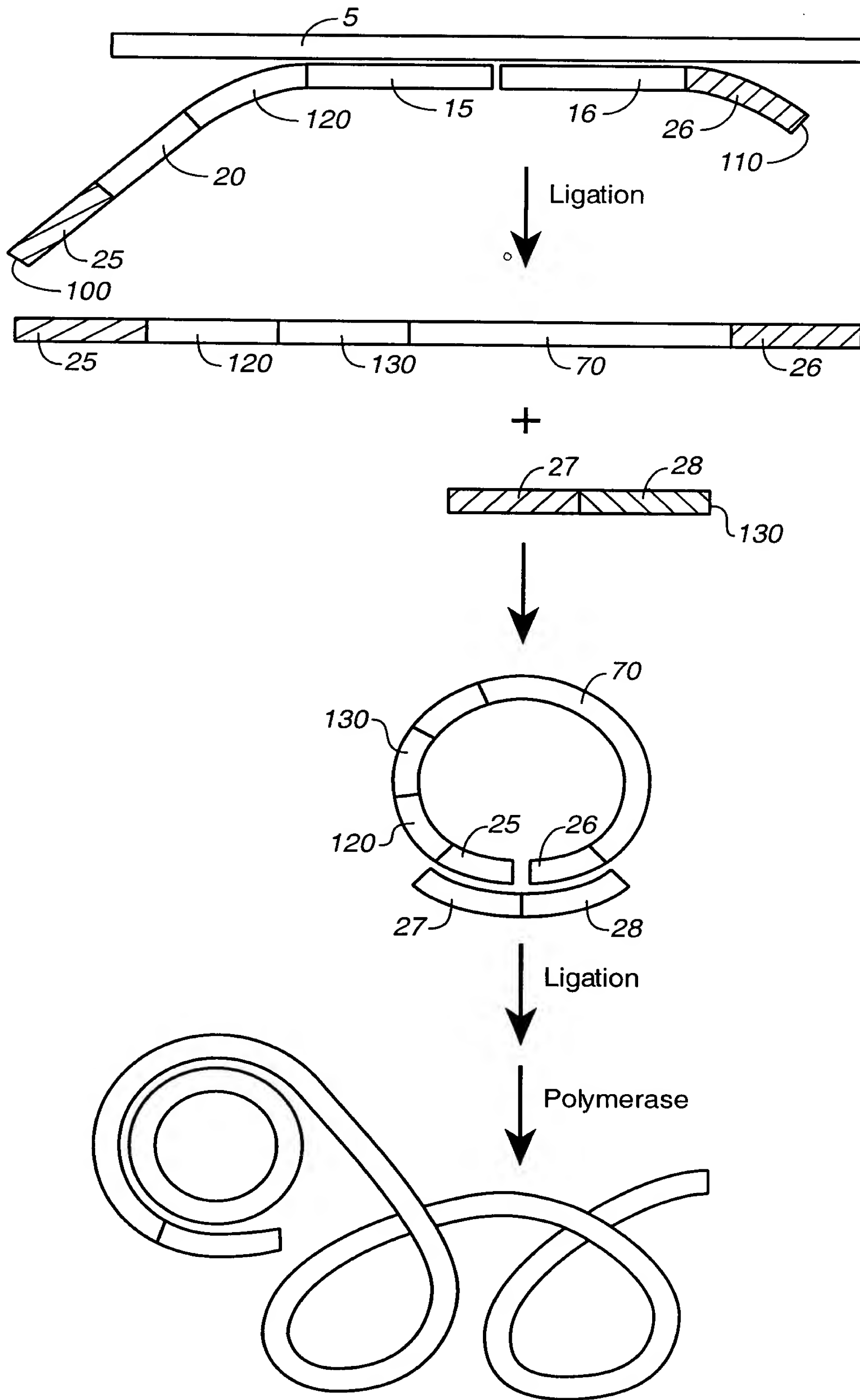


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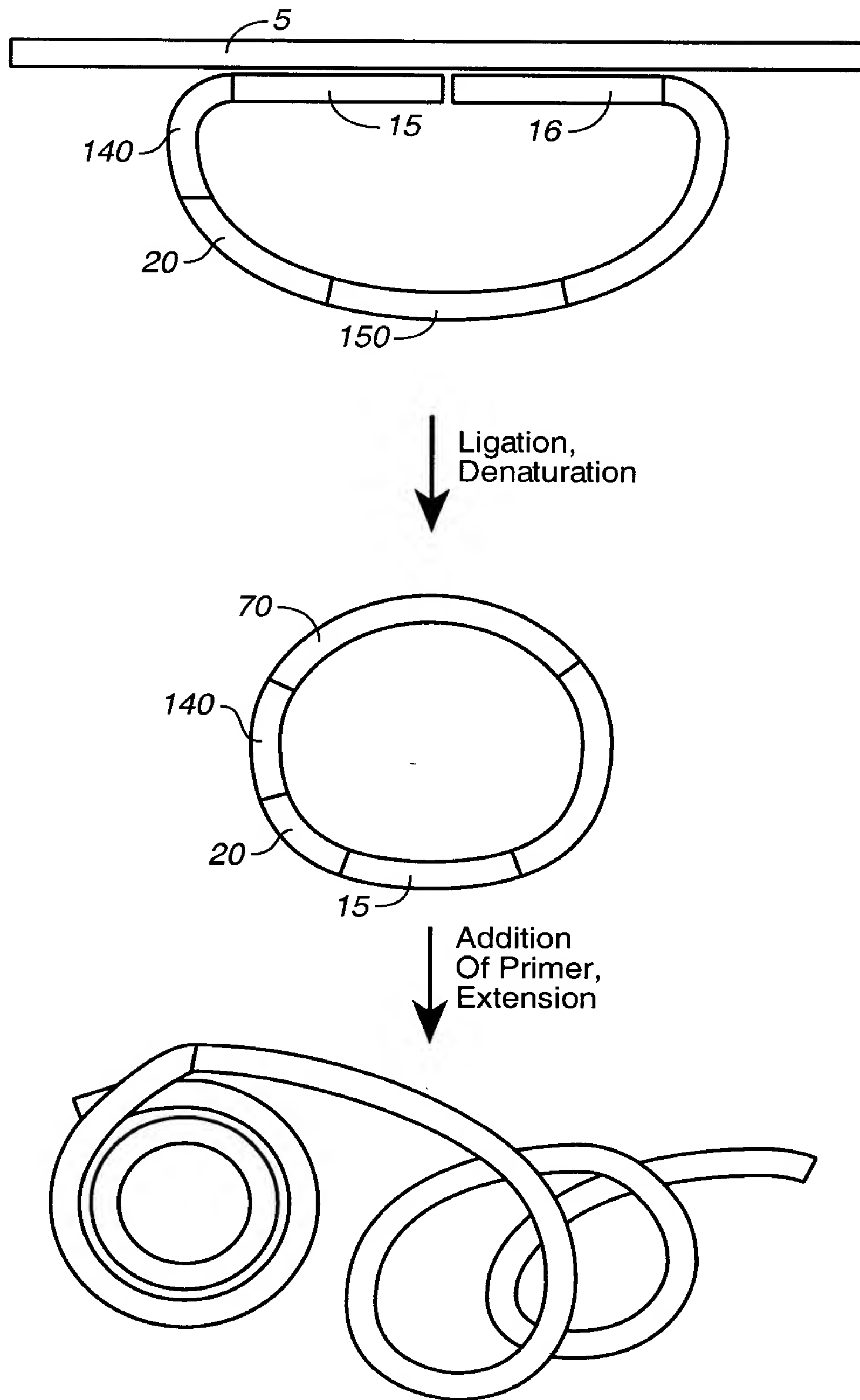


**FIG. 8**





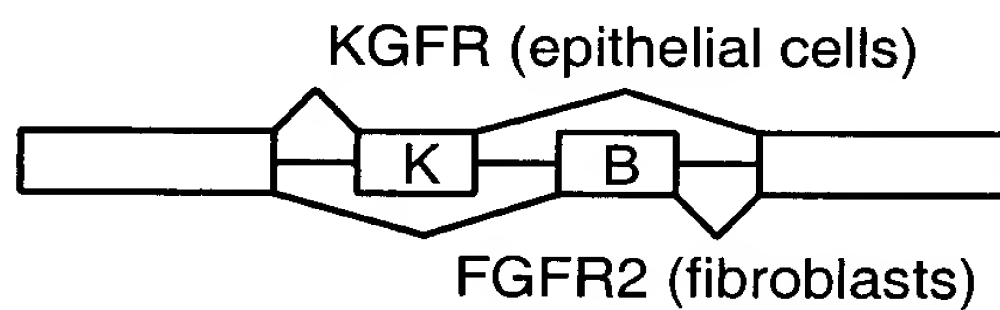
**FIG. 9**



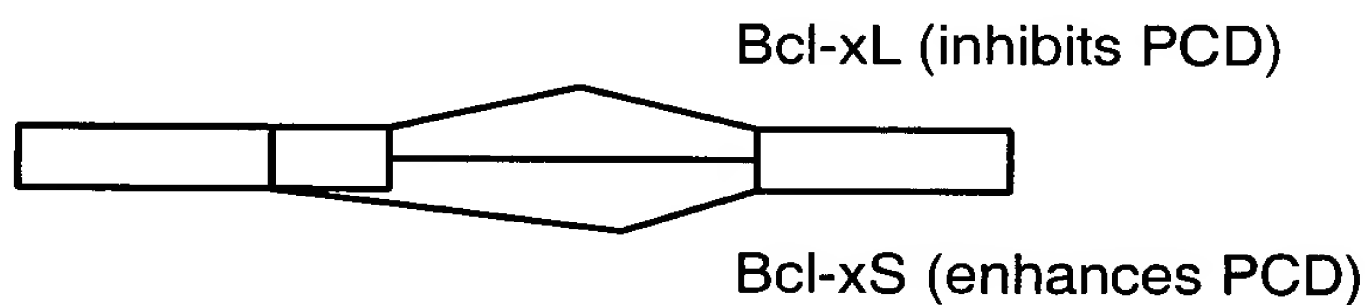
**FIG.\_10**

### Alternative Splicing Targets Selected for Microarray Analysis

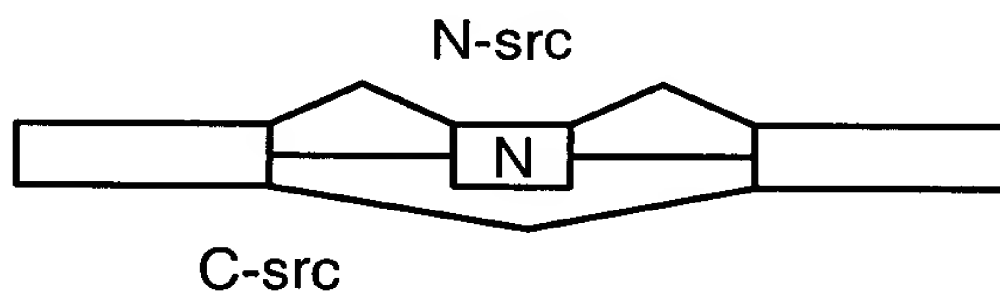
1. GAPDH (constitutive splicing control, signal normalization).
2. FGFR2 / KGF (mutually exclusive exons, internal cell type control):



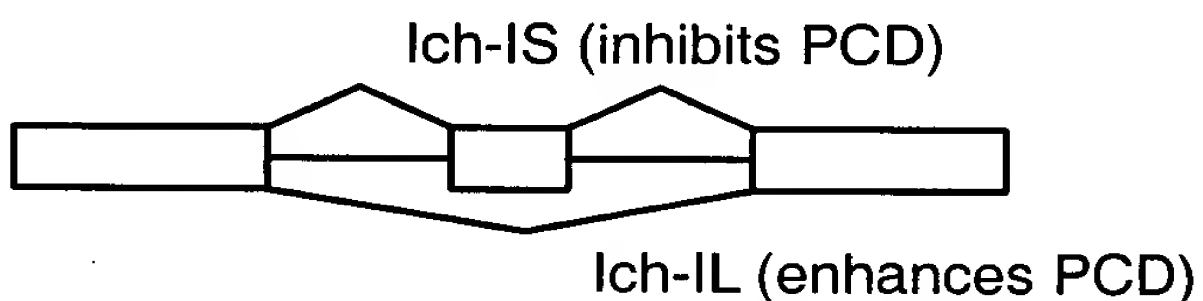
3. Bcl-x (alternative 5' ss):



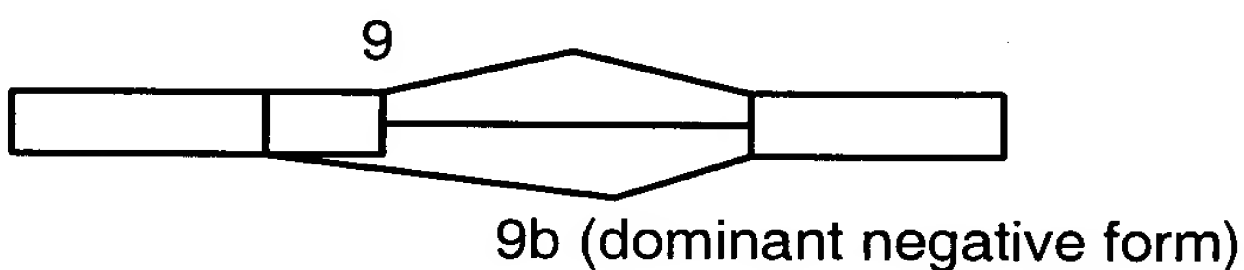
4. c-src (exon inclusion / exclusion):



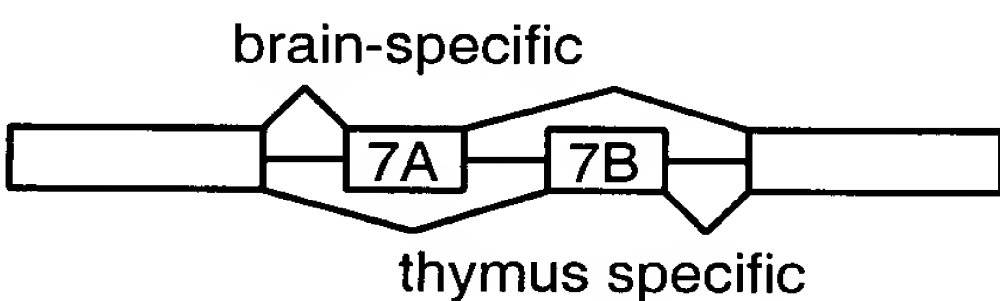
5. CASP2 (exon inclusion / exclusion):



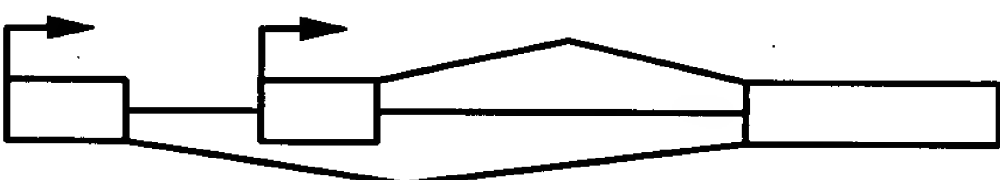
6. CASP9 (alternative 5' ss):



7. Fyn (src family tyrosine kinase, mutually exclusive exons);



8. NOS1 (alternative promoters / alternative 5' ss):



**FIG. 11**